1 **EXECUTIVE SUMMARY**

2 PROJECT OBJECTIVES, PURPOSE, AND NEED

- 3 Venoco, Inc, (Venoco), a privately held, independent oil and gas company, is seeking
- 4 approval from the California State Lands Commission (CSLC) for a new 10-year State
- 5 lease (PRC 3904.1) of State-owned sovereign lands. The lease, if granted, would allow
- 6 Venoco to continue operating the offshore improvements associated with the Ellwood
- 7 Marine Terminal (EMT), a crude oil marine loading terminal and associated storage
- 8 facility, through February 28, 2013, or for the next seven years.
- 9 The State California Environmental Quality Act (CEQA) Guidelines section 15126.6 (a)
- 10 requires that a range of reasonable alternatives to the proposed Project must be
- 11 described, analyzed, and feasibly attain most of the basic objectives of the Project.
- 12 Therefore, in order to explain the need for the proposed Project, and to guide in
- 13 development and evaluation of alternatives, the following basic objectives of the
- 14 proposed Project have been identified by the Applicant:
 - A new State lease would allow Venoco to continue operating the offshore improvements associated with the EMT, the associated onshore storage facility, and barge transit operations along coastal shipping routes to the Los Angeles and San Francisco Bay areas.
 - The offshore improvements subject to the State lease are used to transfer crude oil produced by Venoco to a barge for transportation to market. This transportation method eliminates the need for tanker truck transportation of crude oil from Santa Barbara to markets in Los Angeles and the Bay Area.

DESCRIPTION OF PROPOSED PROJECT

- 24 In August 1929, the Bankline Oil Company leased the land on which the onshore
- 25 improvements associated with the EMT are located. This onshore land is located
- adjacent to the Pacific Ocean, 0.75 mile (1.2 kilometers [km]) northwest of Coal Oil
- 27 Point in Santa Barbara County, California, approximately one mile (1.6 km) west of the
- 28 intersection of Storke and El Colegio Roads, as shown in Figure ES-1. The current
- 29 owner of the onshore land is the University of California, Santa Barbara (UCSB). In
- 30 1997, Venoco acquired the tenant's right under the lease with respect to the onshore
- 31 land. The current lease with UCSB will expire in 2016.

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Figure ES-1 Proposed Project Location



 The offshore portion of the EMT is leased to Venoco pursuant to the State Lease PRC 3904.1. The lease area covers a block of land extending offshore some 2,600 feet (792 meters [m]) near the city of Goleta, and consists of 2.9 acres (1.2 hectares) of State sovereign land that is used as an offshore transfer facility for crude oil. The offshore portion of the EMT is located in that block and consists of an irregular six-point mooring system in approximately 60 feet (18 m) of water, with associated pipeline and subsea hoses. The CSLC's leasing jurisdiction over the EMT extends to the ordinary high water mark. The CSLC's regulatory jurisdiction extends to the first valve outside the containment areas surrounding the two onshore crude oil storage tanks (as per agreement with California State Fire Marshall, dated April 30, 2003). The two tanks are integral components of terminal operations.

The CSLC first entered into a State lease with respect to existing offshore pipelines and other improvements associated with the EMT with Signal Oil and Gas Company beginning February 28, 1968, for a period of 15 years, with the option to renew the lease for three additional periods of 10 years each. That lease was subsequently

- 1 terminated, and the current State lease was executed with Aminoil, Inc., for a 10-year
- 2 period beginning March 1, 1983, with two renewal options of 10 years each. The lease
- 3 was then assigned to various entities and, on July 11, 1997, the CSLC approved the
- 4 assignment of the State lease to Venoco. Since March 1993, the CSLC has been
- 5 granting one-year extensions of the lease. Venoco has notified the CSLC that it wishes
- 6 to exercise its last 10-year lease renewal option, as provided in the State lease, to
- 7 extend the State lease through February 28, 2013. As the CSLC lease, if authorized,
- 8 will expire in 2013, and Venoco must cease operations or apply for a new State lease at
- 9 that time. By 2016, the UCSB lease will expire, and the onshore portion of the EMT
- must be abandoned and returned to its original condition or a new lease negotiated with
- 11 UCSB.
- 12 Venoco is seeking approval from the CSLC for a new State lease for an additional 10
- 13 years (through February 28, 2013). This would allow Venoco to continue operating the
- 14 EMT. As defined in section 15378(a)(3) of the State CEQA Guidelines, the proposed
- 15 Project is the granting of a new 10-year State lease.
- 16 The proposed Project does not include construction of any new facilities or
- 17 modifications to any existing facility; however, it includes the potential for increasing
- 18 crude oil throughput and transportation from current levels to the permitted levels.

19 ALTERNATIVES TO PROPOSED PROJECT

20 No Project Alternative

- 21 Under the No Project Alternative, Venoco's lease would not be renewed and the existing
- 22 EMT would be abandoned in place or removed. A decision to remove or abandon the
- 23 EMT will be the subject of a subsequent application to the CSLC and Santa Barbara
- 24 County, and will be subject to appropriate environmental review. Abandonment of the
- 25 facility would likely involve the following actions:
- Magnetic survey of ocean bottom;
- Abandon and remove all EMT components above and below ground;
- Abandon in place the 10-inch (25-centimeter [cm]) pipeline, ExxonMobil Pacific
 Line 96 (Line 96);
- Abandon in place certain portions of the 10-inch (25-cm) subsea cargo pipeline;

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- Site Cleanup Verification Side Scan Sonar and Remote Operated Vehicle (ROV) using video and Mesotech sonar equipment; and
 - Following abandonment of the EMT components, a Phase I and Phase II site
 assessment will be conducted. Based on the results, a site closure plan will be
 prepared for approval by the appropriate agencies. In addition, a Restoration
 Erosion Control, and Restoration Program (RECRP) will be developed for
 approval.

8 Under the No Project Alternative, an alternative means of crude oil transportation would 9 either need to be in place prior to decommissioning of the EMT or production at Platform Holly would cease. In the absence of the EMT and alternative crude oil 10 11 transportation methods, the petroleum resources associated with the South Ellwood 12 Field would be stranded, at least temporarily. It is more likely, however, that under the 13 No Project Alternative, Venoco would pursue alternative means of traditional oil 14 transportation such as truck transportation or a pipeline. Accordingly, the potential 15 environmental impacts of the latter two forms of crude oil transportation are described 16 and analyzed in this EIR. For purposes of this EIR, it has been assumed that he No 17 Project Alternative would result in a decommissioning schedule that would consider 18 implementation of one of the described transportation options. Any future crude oil 19 transportation method would be the subject of a subsequent application to the CSLC, 20 city of Goleta, or Santa Barbara County, depending on the proposed alternative.

Truck Transportation Option

- 22 This option would involve the use of trucks to transport crude oil from the Venoco
- 23 Ellwood Onshore Facility (EOF) to a Venoco oil and gas processing facility in
- 24 Carpinteria where it could be transported to Los Angeles area refineries via an existing
- 25 crude oil pipeline. Trucks from the EOF would enter Highway 101 at the nearby
- 26 Hollister Avenue onramp and travel east on Highway 101 for approximately 25 miles (40
- 27 km) to Carpinteria. At Carpinteria, trucks would exit the highway at Bailard Avenue, and
- 28 travel a short distance along Carpinteria Avenue to Dump Road and the Venoco
- 29 Carpinteria Facility. The total one-way distance traveled by each truck would be
- 30 approximately 27 (43 km) miles.
- 31 The EMT tanks and equipment would not be utilized for this transportation option. The
- 32 EMT and Line 96 would be abandoned (see EMT abandonment discussion above).
- 33 Existing tanks at the EOF would be utilized for buffering of crude oil flows. Three tanks
- 34 (the two existing crude oil tanks and the oily water tank), with a total capacity of 6,000

- 1 barrels (bbls) (954 m³), could be available for storage at the EOF. Under this option, a
- 2 truck loading rack would be constructed at the EOF to accommodate the necessary
- 3 truck loading requirements. A truck unloading rack would be required at the Venoco
- 4 Carpinteria Facility to transfer crude oil from the truck to an existing storage tank at the
- 5 facility. The crude oil would be co-mingled with production from the Venoco Carpinteria
- 6 Facility and transported via existing pipeline to Los Angeles area refineries.
- 7 Each tandem truck can hold approximately 160 bbls (25 m³). At the current South
- 8 Ellwood Field production rate of 4,000 bbls of oil per day (BPD) (636 m³/day), 25 truck
- 9 trips would be required to transport crude oil to Carpinteria. Under the permitted facility
- 10 capacity of 13,000 BPD (2,067 m³/day), 82 truck trips (164 one-way trips) per day would
- 11 be required.

12 **Pipeline Transportation Option**

- 13 This crude oil transportation option would involve the construction of an onshore 10-inch
- 14 (25-cm) diameter crude oil pipeline from the EOF to the Plains All American Pipeline
- 15 (AAPL) at Las Flores Canyon. The proposed 10-inch (25-cm) diameter pipeline would
- 16 cross under Highway 101 near the EOF and run parallel to the north side of the highway
- 17 for approximately 10 miles (16 km) to Las Flores Canyon. At Las Flores Canyon the
- 18 pipeline would run a short distance up the canyon to the AAPL pump station that is
- 19 located at the ExxonMobil Santa Ynez Unit (SYU) oil and gas processing facility. The
- 20 Venoco pipeline would tie in directly to the AAPL and would not utilize any of the
- 21 ExxonMobil SYU storage tanks.
- 22 The EMT tanks and equipment would not be utilized for this transportation option. The
- 23 EMT and Line 96 would be abandoned (see EMT abandonment discussion above).
- 24 Existing tanks at the EOF would be utilized for buffering of crude oil flows. Three tanks
- 25 (the two existing crude oil tanks and the oily water tank), with a total capacity of 6,000
- 26 bbls (954 m³), could be available for storage at the EOF. The pipeline would be
- 27 installed along Calle Real, which runs parallel to Highway 101 north of the highway.
- 28 Since Calle Real does not run the entire length of the proposed pipeline route, the
- 29 pipeline would also cross a few stretches of private ranch/agricultural roads that parallel
- 30 Highway 101.

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ENVIRONMENTAL IMPACTS AND MITIGATION

- 32 This EIR identifies and analyzes the potentially significant environmental impacts
- 33 associated with the proposed Project. The impact analysis is based on information

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- 1 provided by Venoco in the initial application and subsequent data requests, as well as
- 2 supplementary investigations and research conducted by the EIR preparers.
- 3 The analysis indicates that the proposed Project would result in a number of potentially
- 4 significant impacts to the environment, primarily associated with the possibility of an
- 5 accidental release of crude oil. Even with identified mitigation measures, not all of the
- 6 potentially significant impacts can be reduced to less than significant levels.
- 7 Table ES-1 presents a summary of environmental impacts and mitigation measures for
- 8 the proposed Project. This table is presented by issue area. Within each issue area,
- 9 each impact is described and classified, recommended mitigation is listed, and the level
- of impact with mitigation is stated. All significant adverse impacts that remain significant
- 11 after mitigation (identified as Class I in this document) are presented first, followed by
- 12 Class II significant adverse impacts that can be eliminated or reduced below an issue's
- 13 significance criteria. Lastly, adverse impacts that do not meet or exceed an issue area's
- significance criteria (Class III) are listed, followed by beneficial impacts (Class IV).

COMPARISON OF PROPOSED PROJECT AND ALTERNATIVES

- 16 The State CEQA Guidelines (section 15126.6(d)) requires that an EIR include sufficient
- 17 information about each alternative to allow meaningful evaluation, analysis, and
- 18 comparison with the proposed Project. A matrix displaying the major characteristics
- and significant environmental effects of each alternative may be used to summarize the
- 20 comparison. Table ES-2 provides a comparison of the proposed Project with the No
- 21 Project Alternative, including the two crude oil transportation options.

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures |
|---------------|---|-----------------|--|
| Section | 4.1 Geological Resources | | |
| GEO-1 | Ground-disturbing pipeline replacement activities and/or oil spill remediation may cause localized sloughing of unconsolidated alluvial sands, artificial fill, and dune sands. | III | None required. |
| GEO-2 | Beach scour could substantially damage structural components of the EMT. | II | GEO-2a. Consistent with recommendations by the County Energy Division (Santa Barbara County Energy Division 1999) and the California State Lands Commission (CSLC) Engineering Department, the marine loading line shall be monitored after winter storms for exposure, debris impact and for unsupported spans. Should the pipe free span approach 30 feet (9 m) in the future, remedial actions, e.g., sandbags beneath the pipe, permanent pipe supports, evacuating the line, etc., shall be implemented to maintain the integrity of the line. In addition, assessment of the strains on the pipeline due to settling should be conducted when the pipeline is exposed and any additional supports should be added at that time. |

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures |
|---------------|--|-----------------|---|
| GEO-3 | Weathering-induced corrosion could substantially damage structural components of the EMT. | II | GEO-3a. Consistent with recommendations by the County Energy Division (Santa Barbara County Energy Division 2002) and the CSLC Engineering Department, the marine loading line shall be monitored after winter storms. In the event that the line is exposed by winter beach scour, the Applicant shall inspect the line with GUL and confirm thickness of problem areas with ultrasonic testing technology. The Applicant shall re-coat and re-wrap all segments of the line damaged or missing pipeline coating. In addition, the remaining unexposed portion of pipe in the intertidal area shall similarly be excavated (preferably with hand tools), inspected, tested, re-wrapped, and re-coated. In addition, other structural components of the EMT, including the tanks, connecting pipelines, and valves shall be monitored for corrosion-related damage. This maintenance should be conducted on the pipeline if pipeline exposure does not occur within the next 5 years. The loading pipeline testing and inspection program shall comply with MOTEMS. |
| GEO-4 | Ground-disturbing pipeline replacement activities and/or oil spill remediation could result in increased erosion and sedimentation of local drainages. | II | GEO-4a . Best Management Practices (BMPs) such as temporary berms and sedimentation traps, including silt fencing, straw bales, and sand bags, shall be installed prior to work involving ground disturbance. The BMPs shall include maintenance and inspection of the berms and sedimentation traps during rainy and non-rain periods, as well as revegetation of impacted areas. Re-vegetation shall address plant type as well as monitoring to ensure appropriate covering of exposed areas. |

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures |
|---------------|---|-----------------|---|
| GEO-5 | Seismic activity along the More Ranch Fault Zone or other regional faults could produce fault rupture, seismic ground shaking, liquefaction, or other seismically induced ground failure that would expose people and structures to greater than normal risk during the lease period. | II | GEO-5a . The Applicant shall cease terminal operations and inspect all EMT pipelines and storage tanks following any seismic event in the region (Santa Barbara County and offshore waters of the Santa Barbara Channel and Channel Islands) that exceeds a Richter magnitude of 4.0. Implement MM HM-1a and HM-1b identified in Section 4.2, Hazards and Hazardous Materials. The Applicant shall report the findings of such inspection to the CSLC and the SSRRC and shall not reinstitute operations of the EMT until authorized to do so by the CSLC. |
| Section | 4.2 Hazards and Hazardous Materials | | |
| HM-1 | A spill of oil could result in acute impacts to the surrounding areas by exposing persons to crude fires and toxic vapors. | II | HM-1a. The Applicant shall institute measures to reduce the crude oil hydrogen sulfide content before the crude oil leaves the EOF. These measures could include increased crude oil scrubbing or other measures to reduce the hydrogen sulfide levels in the crude oil. HM-1b. The Applicant shall, within 6 months time, develop and submit to the CSLC and the County of Santa Barbara for review and approval, a tank maintenance program for the EMT crude oil tanks that addresses inspections, inspection frequency (both external and internal), maintenance of tank shell and appurtenances, non-destructive testing, cathodic protection, dike and drain maintenance, and seismic analysis and retrofits to ensure tanks conform to current building codes. API 653 full tank inspections should be conducted by a registered API 653 tank inspector at least every 5 years. |
| HM-2 | A spill of oil could result in impacts to the surrounding areas by impacting environmental resources. | I | See mitigation measures listed in Sections 4.4, Hydrology and Water Quality, 4.5, Biological Resources. |

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures |
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| НМ-3 | A spill of oil could result in larger impacts if the loading line is not capable of operating in vacuum mode or being evacuated. | II | HM-3a . The Applicant shall ensure that the loading line can be operated in a vacuum and that operation in a vacuum is established as part of the terminal operations manual and as part of the oil spill response. In lieu of vacuum operation, applicant could implement a method for evacuating the loading line in the event of a leak. Evacuation of the line should be possible at all times during loading (even when barge is empty). |
| HM-4 | A spill of oil could result in larger impacts if the leak goes undetected for a long period of time. | II | HM-4a. The Applicant shall ensure that both the shipping end and the receiving end of the loading pipeline are equipped with flow meters and that the flow meters utilize a means of conducting automatic and continuous flow balancing to an accuracy of at least 2 percent. Any deviations shall activate an alarm system at both the shipping and receiving locations. Barge loading should only occur during daylight hours when there is clear visibility to ensure smaller leaks are detectable. |
| HM-5 | A spill of oil could result in larger impacts if the leak is not captured by a boom in a short period of time or small spills may go unnoticed if a boom is not in place. | II | HM-5a . The Applicant shall pre-boom all oil transfers using booms that are effective for the ocean conditions at the EMT location. For loading operations, the boom shall enclose the water surface surrounding the vessel to provide containment for the entire vessel at the waterline. The boom shall be deployed so that it provides a stand-off of not less than 4 feet (1.2 m) from the outboard side of the vessel. |
| HM-6 | A failure to inspect the loading pipeline for corrosion or unsupported spans could result in a release of crude oil and an impact to the environment. | II | HM-6a . The Applicant shall investigate and utilize a non-destructive testing procedure, which will enable inspection of the loading pipeline from the pump-house to the hose connection for both corrosion, internal and external, and for allowable pipe stresses due to settling. Visual inspection of the entire pipeline route for unsupported spans or other pipeline route anomalies should also be conducted at least every 3 years. |

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|---------------|--|-----------------|---|
| HM-7 | A spill of crude oil at the EMT pumps could impact the sensitive slough areas through unprotected drains. | II | HM-7a. The Applicant shall install drain protection in the form of sealable coverings, valves, or other method to prevent flow of spilled oil through the drains, on the EMT drains located at the far southern end of the EMT, immediately near the pumps and on the far side of the control shack. The drain protection would prevent a spill of crude oil that occurs at the loading pumps and/or at other EMT equipment from entering the drains and affecting the slough. Berms located at this end of the EMT should also be checked to ensure they can contain a worst case discharge from the pump. |
| НМ-8 | A spill of crude oil at the Barge could impact additional sensitive areas if response is not adequate. | II | HM-8a . The Applicant shall conduct periodic equipment deployment and on-water drills utilizing the response vessel (the Penguin) as well as other vessels that would respond to a drill. Drills should have a post-drill lessons-learned evaluation which is incorporated into the training and EAP documentation. Procedures for conducting drills should be detailed on the EAP. |
| HM-9 | A spill of crude oil from the barge could be due to accidental grounding, collision, allision, or puncturing of the barge bottom which is exacerbated by the use of single-hulled vessels. | II | HM-9a . The Applicant shall replace or convert the barge Jovalan with a double-hulled barge by the 2010 timeframe established by CFR Title 33 as the phase-in date for larger vessels to be double-hulled vessels. |

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| Section | 4.3 Air Quality | | |
| AQ-1 | Proposed Project could potentially result in increased operational emissions at the EMT and the barge Jovalan. | II | AQ-1a. If the proposed Project requires more than 75 barge trips/loadings in any consecutive 12-month period, the Applicant shall implement an emission reduction program that would consist of the following: (1) Hire a tug and/or assist vessels that have combined NOx emissions approximately 20 percent lower than the current tug and assist vessels, and |
| | | | (2) Reduce running time of the tug vessel generator engine(s) during the time when the tug vessel is moored at the EMT and is not moving or mooring the barge. The time reduction shall be at least 20 percent. |
| | | | AQ-1b. The operators of the tug and assist vessels shall shut off the main and auxiliary engines during loading when not moving or mooring the barge Jovalan. |
| AQ-2 | Proposed Project could result in increased barge loadings and increased potential for an oil spill, and thus could potentially result in increased nuisance odor events. | II | AQ-2a. The Applicant shall install vapor control devices, e.g., carbon canisters or equivalent devices, on the vents of the crude oil storage tanks. The Applicant shall submit an appropriate replacement schedule for the vapor control devices to the APCD for its review and approval. AQ-2b. The Applicant shall install proximity switches on the PSVs on the barge Jovalan, to prevent the lifting of the PSVs due to overpressure. The switches shall be telemetered to the control room on the barge and trigger an alarm. The operating procedures shall require immediate shutdown of the pumps in case of overpressure. Implementation of HM-1a, HM-1b, HM-4a, and HM-6a would also reduce potential for accidental releases of odorous compounds. |

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|---------------|---|-----------------|---|--|--|
| AQ-3 | The proposed Project could potentially result in increased HAP emissions from the EMT and barge Jovalan and thus increase health risk. | III | None required. | | |
| Section | 4.4 Hydrology, Water Resources, and Water Qua | lity | | | |
| WQ-1 | Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect marine water quality. | I | Implement WQ-2a discussed below and MM HM-1b through HM-9a identified in Section 4.2, Hazards and Hazardous Materials. | | |
| WQ-2 | A rupture or leak from the marine loading line, oil storage tanks, or other EMT infrastructure could substantially degrade surface and groundwater quality. | I | WQ-2a. A site-specific Storm Water Pollution Prevention Plan shall be prepared and submitted to the California Regional Water Quality Control Board, Central Coast Region, before the lease extension is granted, to prevent adverse impacts to nearby waterways associated with oil spills and contaminated storm water releases not covered under the EAP, which only applies to "significant events" and is not discussed in detail by the OSCP. This plan would similarly include, but not be limited to site-specific diagrams illustrating primary surface drainage features, e.g., the southeast trending gully leading to the dune swale pond, and proposed spill containment, i.e., dike configurations, within those drainages; delineation of drainage features; and a description of Best Management Practices, including spill containment equipment and procedures that are tailored for the project site. The plan shall also describe the source water, existing uses, and water disposal protocol of the onsite pond, in the southwest portion of the EMT. | | |
| Section | Section 4.5 Biological Resources | | | | |
| BIO-1 | Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect marine biological resources. | I | BIO-1a. Offshore inspections of the loading pipeline shall be conducted on a regular basis, as determined by the CSLC and/or other regulatory agency, throughout the extended life of the Project. Inspections shall use the best available technology. When structural anomalies are identified | | |

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| | | | that compromise the integrity of the pipeline, as determined by the CSLC and/or other regulatory agency, flow through the pipeline shall cease until repairs can be effected. BIO-1b. The Applicant shall update the OSCP to incorporate changes in activities that result from the proposed Project. For example, the plan shall incorporate detailed response procedures for marine oil spills resulting from vessel groundings or collisions, as well as for pipeline failure and failures occurring during transfer of the oil to and from the barge. Worst-case discharge scenarios shall be updated accordingly. In addition, lessons learned from the cleanup of the 1997 Platform Irene oil spill shall be incorporated into the Response Plan. These lessons include operator training in recognizing the significance of deviations in pipeline operating parameters, inspections required to restarting equipment that automatically shuts down in response to a process deviation, and rapidly implementing surveillance activities following process deviations to determine if a spill has occurred. The personnel and training sections of the OSCP shall be updated and identify training requirements for all personnel that would be utilized to respond to oil spills. At a minimum, new personnel shall be trained immediately upon their hiring in the overall operational aspects of oil spill response, including the proper use of all equipment that would be utilized in oil spill response. Annual training for all personnel, which is a Federal requirement, shall also be included in the OSCP to provide personnel with an understanding of their training responsibilities. The annual training shall include training in the operation of new equipment that may be utilized in oil spill response, retraining in the operation of existing equipment, and review of the oil spill response requirements that are identified in the OSCP. Implementation of those measures identified in Sections 4.2, Hazards |

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| | | | and Hazardous Materials; 4.4, Hydrology, Water Resources, and Water Quality for contingency planning and spill response would be required. |
| BIO-2 | Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect commercial and recreational fishing. | I | In addition to BIO-1a and BIO-1b described above, implementation of those measures identified in Sections 4.2, Hazards and Hazardous Materials; 4.4, Hydrology, Water Resources, and Water Quality for contingency planning and spill response would be required. |
| BIO-3 | Accidental discharge of petroleum hydrocarbons into marine waters would adversely affect kelp and commercial kelp harvesting. | III | None required. |
| BIO-4 | Marine vessel traffic to and from the EMT could cause loss or damage to commercial fishing gear in the project area. | II | BIO-4a. Support vessels shall use designated traffic corridors. If support vessels travel outside such corridors and damage fishing gear, disputes over damage to commercial fishing gear resulting from EMT support vessel traffic shall be submitted to the Joint Oil/Fisheries Committee for resolution. |
| BIO-5 | Increases in vessel traffic may adversely affect marine mammals and turtles. | II | BIO-5a. The Applicant shall ensure that vessel operators develop and implement a contingency plan that focuses on recognition and avoidance procedures when marine mammals are encountered at sea. Minimum components of the plan include: 1. Existing and new vessel operators shall be trained by a marine mammal expert to recognize and avoid marine mammals prior to project-related activities. Training sessions shall focus on the identification of marine mammal species, the specific behavior of species common to the project area and barge routes, and awareness of seasonal concentrations of marine mammal species. The operators shall be re-trained annually. 2. A minimum of two marine mammal observers shall be placed on all support vessels during the spring and fall gray whale migration |

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|---------------|--------|-----------------|--|
| | | | known to be in the project area and along the barge route in relatively large numbers. Observers can include the vessel operator and/or crew members, as well as any project worker that has received proper training. |
| | | | 3. Vessel operators will make every effort to maintain a distance of 1,000 ft (305 m) from sighted whales and other threatened or endangered marine mammals or marine turtles. |
| | | | 4. Vessel speed shall be limited to 16 mph (14 knots). |
| | | | Support vessels will not cross directly in front of migrating whales or any other threatened or endangered marine mammals or marine turtles. |
| | | | 6. When paralleling whales, supply vessels will operate at a constant speed that is not faster than the whales. |
| | | | 7. Female whales will not be separated from their calves. |
| | | | 8. Vessel operators will not herd or drive whales. |
| | | | If a whale engages in evasive or defensive action, support vessels will drop back until the animal moves out of the area. |
| | | | Any collisions with marine wildlife will be reported promptly to the Federal and State agencies listed below pursuant to each agency's reporting procedures. |
| | | | Stranding Coordinator, Southeast Region (currently, Joe Cordaro) National Marine Fisheries Service Long Beach, CA 90802-4213 (310) 980-4017 |

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures |
|---------------|---|-----------------|--|
| | | | Enforcement Dispatch Desk California Department of Fish and Game Long Beach, CA 90802 (562) 590-5132 or (562) 590-5133 California State Lands Commission Environmental Planning and Management Division Sacramento, CA 95825-8202 (916) 574-1890 |
| BIO-6 | Noise and lighting from vessel support and transit activities may potentially disturb marine mammals and birds in the project area. | III | None required. |
| BIO-7 | An accidental oil spill and subsequent cleanup efforts would potentially result in the loss or injury of threatened, endangered, or candidate species, the loss or degradation of functional habitat value of sensitive biological habitat, or cause a substantial loss of a population or habitat of native fish, wildlife, or vegetation. | | BIO-7a. The OSCP shall be revised and updated to address protection of sensitive biological resources and revegetation of any areas disturbed during an oil spill or cleanup activities. The revised OSCP shall, at a minimum, include: 1. Specific measures to avoid impacts on Federal- and State-listed endangered and threatened species and ESHAs during response and cleanup operations. 2. Where feasible, low-impact, site-specific techniques such as hand-cutting contaminated vegetation and using low-pressure water flushing from vessels shall be specified in the OSHMP to remove spilled material form particularly sensitive wildlife habitats, such as coastal estuaries, i.e., Devereux Slough, because procedures such as shoveling, bulldozing, raking, and drag-lining can cause more damage to a sensitive habitat than the oil spill itself. The OSCP shall also evaluate the non-cleanup option for ecologically vulnerable habitats such as coastal estuaries. |

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures |
|---------------|--------|-----------------|--|
| | | | Spill response personnel shall be adequately trained for response in terrestrial environments and spill containment and recovery equipment shall be maintained in full readiness. Inspection of equipment and periodic drills shall be conducted at least annually and the results evaluated so that spill response personnel are familiar with the equipment and with the project area including sensitive onshore biological resources. When habitat disturbance cannot be avoided, the OSCP shall provide stipulations for development and implementation of site-specific habitat restoration plans and other site-specific and species-specific measures appropriate for mitigating impacts on local populations of sensitive wildlife species and to restore native plant and animal communities to pre-spill conditions. Access and egress points, staging areas, and material stockpile areas that avoid sensitive habitat areas shall be identified. The OSCP shall include species- and site-specific procedures for collection, transportation |
| | | | and treatment of oiled wildlife, particularly for sensitive species. 5. Procedures for timely re-establishment of vegetation that replicates the habitats disturbed (or, in the case of disturbed habitats dominated by non-native species, replaces them with suitable native species) including: measures preventing invasion and/or spread of invasive or undesired plant species; restoration of wildlife habitat; restoration of native communities and native plant species propagated from local genetic sources including any sensitive plant species (such as the southern tarplant); and replacement of trees at the appropriate rate. 6. Monitoring procedures and minimum success criteria to be satisfied for restoration areas shall be determined. The success criteria shall consider the level of disturbance and condition of the adjacent habitats. Monitoring shall continue for 3 to 5 years, depending on |

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures |
|---------------|--|-----------------|--|
| | | | habitat, or until success criteria are met. Appropriate remedial measures, such as replanting, erosion control or control of invasive plant species, shall be identified and implemented if it is determined that success criteria are not being met. |
| Section | 4.6 Cultural, Historical, and Paleontological Res | ources | |
| CR-1 | An accidental oil spill and subsequent clean-up efforts would potentially result in disturbance to and unauthorized archaeological artifact collection from CA-SBA-1327 and/or CA-SBA-2341 | II | CR-1a. The Oil Spill Contingency Plan (OSCP) shall be revised and updated to specifically address protection of cultural resources that could be disturbed during an oil spill or cleanup activities. The process to revise the OSCP shall, at a minimum, include: |
| | deposits. | | (1) A workshop shall be conducted by a qualified archaeologist and by a local Native American representative identified as a most likely descendant of the Barbareño Chumash by the Native American Heritage Commission to ensure that any new discoveries during oil spill cleanup activities are adequately recorded, evaluated, and, if impacted, mitigated. The workshop shall: |
| | | | a. review the types of archaeological resources that may be uncovered; b. provide examples of common archaeological artifacts and other cultural material to examine; c. what makes an archaeological resource significant to archaeologists and local Native American descendants; d. procedures that would be used to record, evaluate, and mitigate new discoveries; e. describe reporting requirements and the responsibilities of spill response personnel. |
| | | | The revised OSCP shall, at a minimum, provide (1) that a qualified archaeologist and Native American representative |

Impact Class

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures | |
|---------------|---|-----------------|--|--|
| | | | shall be present during all ground disturbances within recorded CA-SBA-1327 and/or CA-SBA-2341 site boundaries. (2) procedures that would be followed in case of discovery of disturbed as well as intact human burials and burial-associated artifacts. In the event that human remains would be encountered, the consultation with the most likely Native American descendant pursuant to PRC sections 5097.97 and 5097.98 would apply. | |
| CR-2 | An accidental oil spill and subsequent clean-up efforts would have only a remote potential to impact significant vertebrate fossils. | III | None required. | |
| Section | Section 4.7 Land Use, Planning, and Recreation | | | |
| LU-1 | A number of sensitive habitats and high quality recreational resources are located within the potential area that would be impacted by the spread of oil from an accidental release. Shoreline and water-related uses would be disrupted by oil on the shoreline and in the water and would result in significant impacts. | I | Implementation of those measures identified in Sections 4.1, Geological Resources; 4.2, Hazards and Hazardous Materials; 4.4, Hydrology, Water Resources, and Water Quality; and 4.5, Biological Resources, for contingency planning and spill response. | |
| LU-2 | Spills that reach shore along sensitive land use areas or heavily used areas, including recreational areas, would limit or preclude such uses and result in significant adverse impacts. | I | Implementation of those measures identified in Sections 4.2, Hazards and Hazardous Materials; 4.4, Hydrology, Water Resources, and Water Quality; and 4.5, Biological Resources, for contingency planning and spill response. | |

Section 4.8 Public Services

The Project would not have an impact on publicly provided fire protection and emergency response services.

Section 4.9 Transportation and Circulation

The Project would not have an impact on transportation or circulation.

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures | | | |
|---------------|---|-----------------|---|--|--|--|
| Section | Section 4.10 Noise | | | | | |
| N-1 | The proposed Project would increase the number of days per year that night noise is produced at the EMT. | III | None required. | | | |
| Section | 4.11 Aesthetics/Visual Resources | | | | | |
| VR-1 | The barge Jovalan currently makes approximately two trips to the EMT per month for loading. Under the proposed Project, the barge Jovalan could be present at the EMT approximately seven times per month. The increased visual presence of the barge Jovalan would be considered a significant impact. | I | No mitigation measures have been identified that would reduce the level of this impact. | | | |
| VR-2 | Potentially long term visual impacts of an oil spill, depending on the level of physical impact and cleanup effectiveness. | I | Implementation of those measures identified in Sections 4.2, Hazards and Hazardous Materials; 4.4, Hydrology, Water Resources, and Water Quality; and 4.5, Biological Resources, for contingency planning and spill response. | | | |
| VR-3 | Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of viewers would result in a negative impression of the viewshed and result in significant impacts, depending on the various characteristics of a spill and its residual effects. | I | Implementation of those measures identified in Sections 4.2, Hazards and Hazardous Materials; 4.4, Hydrology, Water Resources, and Water Quality; and 4.5, Biological Resources, for contingency planning and spill response. | | | |
| Section | Section 4.12 Energy and Mineral Resources | | | | | |

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| Impact No. | Impact | Impact Class | Recommended Mitigation Measures | | | |
|---------------|---|-----------------|--|--|--|--|
| ER-1 | Impacts from increased electricity consumption at the project facilities due to operation of the existing electrical equipment at the permitted levels. | III | None required. | | | |
| ER-2 | Impacts from additional diesel use by the EMT and barge Jovalan. | III | None required. | | | |
| Section | Section 4.13 Agricultural Resources | | | | | |
| The Pro | ject would not have an impact on agricultural resource | es. | | | | |
| Section | Section 4.14 Environmental Justice | | | | | |
| EJ-1 | The proposed Project could disproportionately impact minority and/or low-income populations. | III | Implementation of MM HM-1a , and other measures specified in Sections 4.2, Hazards and Hazardous Materials; 4.4, Hydrology, Water Resources, and Water Quality; and 4.5, Biological Resources, for contingency planning and spill response. | | | |

1 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

- 2 The CEQA requires that the specific No Project Alternative be evaluated, along with its
- 3 impacts, as part of the EIR (the State CEQA Guidelines section 15126.6(e)). As such,
- 4 the No Project Alternative was not subject to the screening analysis and has been
- 5 evaluated as an Alternative for the Project throughout the EIR.
- 6 The discussion below compares impacts associated with the proposed Project with
- 7 those associated with the No Project Alternative, as identified as a result of the
- 8 environmental analysis discussed in sections of Chapter 4 of this EIR. An Alternative
- 9 would be considered superior to the proposed Project if there were a reduction in impact
- 10 class. In cases where the impact from an Alternative was in the same class as for the
- 11 proposed Project, differences in severity of the impact were analyzed.
- 12 The EMT Lease Renewal No Project Alternative, as was evaluated in Section 4,
- includes the following two crude oil transportation options:
- Truck Transportation to Carpinteria; and
- Pipeline Transportation to Las Flores Canyon.
- 16 Under the No Project Alternative, Venoco's lease would not be renewed and the existing
- 17 marine terminal would be subsequently decommissioned with its components
- 18 abandoned in place, removed, or a combination thereof. The decommissioning of the
- 19 marine terminal would be governed by an Abandonment and Restoration Plan, a copy
- of which has been submitted to the California State Lands Commission (CSLC), Santa
- Barbara County, and the city of Goleta as a component of Venoco's "Development Plan
- 22 Application for Ellwood Oil Pipeline Installation and Field Improvements" (Venoco 2005).
- Under the No Project Alternative, an alternative means of crude oil transportation would either need to be in place prior to decommissioning of the EMT or production at
- 24 either need to be in place phor to decommissioning of the Eight of production at
- 25 Platform Holly would cease. A consequence of the absence of the EMT and alternative
- crude oil transportation methods would be that the petroleum resources associated with
- the South Ellwood Field would be stranded, at least temporarily. It is more likely, however, that under the No Project Alternative, Venoco would pursue alternative means
- 20 of traditional crude oil transportation such as truck transportation or a pincline
- 29 of traditional crude oil transportation such as truck transportation or a pipeline.
- 30 Accordingly, the potential environmental impacts of the latter two alternative forms of
- 31 crude oil transportation are described and analyzed in this EIR and are summarized in
- 32 Table ES-2. For purposes of this EIR, it has been assumed that the No Project
- 33 Alternative would result in a decommissioning schedule that would consider
- 34 implementation of one of the described transportation options. Any future crude oil

- 1 transportation option would be the subject of a subsequent application to the CSLC, city
- 2 of Goleta, or Santa Barbara County, depending on the proposed option.
- 3 Table ES-2 summarizes impacts from the proposed Project and the No Project
- 4 Alternative including the two crude oil transportation options. The two crude oil
- 5 transportation options, Truck Transportation to Carpinteria and Pipeline Transportation
- 6 to Las Flores Canyon, both offer numerous advantages over the proposed Project and
- 7 avoid a number of significant Class I impacts. Specifically, both transportation options
- 8 would totally avoid or substantially lessen potential impacts related to oil spills in the
- 9 marine environment, impacts to marine water quality, marine biological resources, land
- 10 use, and visual resources. In terms of oil spill risk, these transportation options would
- also result in beneficial impacts when compared to baseline conditions associated with
- 12 current EMT operations.
- 13 Pipeline Transportation to Las Flores Canyon offers some additional advantages over
- 14 Truck Transportation to Carpinteria, mainly in the areas of safety, air quality, and
- 15 energy. The risk of truck accidents and potential injuries and fatalities were determined
- 16 to pose a significant Class I impact, whereas this risk would be minimal for pipeline
- 17 transportation. Air quality impacts associated with truck transportation exhaust would
- 18 result in a significant Class I impact while air quality impacts associated with pipeline
- 19 construction and operation were found to be insignificant. Finally, truck transportation
- 20 would require more net energy use than pipeline transportation. Given the relative
- 21 advantages of pipeline over truck transportation of crude oil, the Pipeline Transportation
- 22 to Las Flores Canyon transportation option is environmentally preferable.
- 23 The State CEQA Guidelines section 15126.6(e)(2) states, in part, that "If the
- 24 environmentally superior alternative is the "No Project" alternative, the EIR shall also
- 25 identify an environmentally superior alternative among the other alternatives."
- 26 As the document does not identify any alternative other than the No Project Alternative,
- 27 there is no obligation to identify an environmentally superior alternative as provided in
- 28 section 15126.6(e)(2).

29

KNOWN AREAS OF CONTROVERSY OR UNRESOLVED ISSUES

- 30 All proposals related to the development and transportation of oil and gas reserves in
- 31 the Santa Barbara Channel generate controversy and receive a high level of public
- 32 scrutiny. This is due to the sensitive nature of the marine resources and the potential
- 33 for safety impacts to the local population. In addition, the 1969 Santa Barbara Channel

- oil spill is considered by many to be a seminal event in the environmental movement and is often cited as an example of what can go wrong with offshore development.
- 3 The proposed Project would extend the use of the EMT. The onshore components of 4 the EMT were constructed in the 1920s and are now considered legal, non-conforming 5 uses. The project area, which had once been heavily industrial, has changed over the 6 decades to be one of the last large expanses of coastal open space in the Goleta Valley 7 and Santa Barbara area. The jurisdictions of the city of Goleta, Santa Barbara County, 8 and UCSB have recently developed the Ellwood Devereux Coast Open Space and 9 Habitat Management Plan to protect the open space and natural resources of the area. 10 Many people in the local communities would like to see the EMT shut down and 11 removed. As such, the proposed Project to extend the lease of the offshore portion of 12 the EMT has generated a high level of public interest and controversy (see Appendix B, 13 Notice of Preparation and Comments).

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| Impact | Impact Description | Proposed | No Project Alternative | | |
|-----------|---|-----------|------------------------|-----------|--|
| No. | o. | | Truck | Pipeline | |
| Section 4 | Section 4.1 Geological Resources | | | | |
| GEO-1 | Slope Failures | III | No Impact | No Impact | |
| GEO-2 | Damage to Facilities Due to Beach Scour | II | No Impact | No Impact | |
| GEO-3 | Facilities Damage due to Corrosion | II | No Impact | No Impact | |
| GEO-4 | Erosion of Drainages | II | No Impact | No Impact | |
| GEO-5 | Faulting and Seismicity | II | No Impact | III | |
| GEO-6 | Erosion and Siltation of Waterways | No Impact | No Impact | II | |
| Section 4 | 1.2 Hazards and Hazardous Materials | _ | | | |
| HM-1 | Acute Risks of an Oil Spill | II | No Impact | No Impact | |
| HM-2 | Risks of Crude Oil Spills to the Environment | I | No Impact | No Impact | |
| HM-3 | Increased Spill Sizes Due to Loading Pipeline Vacuum/Evacuation Operation | II | No Impact | No Impact | |
| HM-4 | Increased Spill Sizes Due to Loading Pipeline Leak Detection | II | No Impact | No Impact | |
| HM-5 | Increased Spill Sizes Due to Failure to Deploy Loading Booms | II | No Impact | No Impact | |
| НМ-6 | Spills Due to Loading Pipeline Failure from Inadequate Loading Pipeline Inspections | II | No Impact | No Impact | |
| HM-7 | Spills Due to Pump Leaks and Lack of EMT Pump Drains Spill Containment | II | No Impact | No Impact | |
| HM-8 | Increased Spill Size Due to Spill Response Planning and Drills | II | No Impact | No Impact | |
| HM-9 | Spills Due to Barge Hull Penetrations | II | No Impact | No Impact | |
| HM-10 | Trucks on Area Highways Impacts to Public Health | No Impact | I | No Impact | |
| HM-11 | Trucks on Area Highways Impacts to the Environment | No Impact | IV | No Impact | |
| HM-12 | Pipeline Impacts to Public Health | No Impact | No Impact | IV | |

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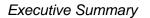
| Impact | Impact Description | Proposed | No Project Alternative | |
|----------------------------------|--|-----------|------------------------|----------------------|
| No. | impact Description | Project | Truck | Pipeline |
| HM-13 | Pipeline Impacts to Environment | No Impact | No Impact | IV |
| Section 4 | 1.3 Air Quality | | | |
| AQ-1 | Operation Emissions | II | No Impact | IV |
| AQ-2 | Odor Emissions | II | IV | IV |
| AQ-3 | Health Risk | III | No Impact | No Impact |
| AQ-4 | Emissions from Truck Transportation | No Impact | I | No Impact |
| AQ-5 | Air Emissions from the Pipeline Construction | No Impact | No Impact | III |
| Section 4 | 1.4 Hydrology, Water Resources, and Water Quality | | | |
| WQ-1 | Oil spill impacts to marine water quality | I | IV | IV |
| WQ-2 | Potential Facilities Leaks and Impacts to Nearby Onshore Waterways | I | No Impact | No Impact |
| WQ-3 | Potential Impacts to Water Quality from Oil Spills from Trucks | No Impact | II | No Impact |
| WQ-4 | Potential Impacts to Water Quality from Oil Spills from the Pipeline | No Impact | No Impact | I |
| Section 4.5 Biological Resources | | | | |
| BIO-1 | Oil Spill Impacts to Marine Biological Resources | I | No Impact | No Impact |
| BIO-2 | Oil Spill Impacts to Commercial and Recreational Fishing | I | No Impact | No Impact |
| BIO-3 | Oil Spill Impacts to Kelp Resources | III | No Impact | No Impact |
| BIO-4 | Marine Vessel Traffic Impacts on Commercial and Recreational Fishing | II | No Impact | No Impact |
| BIO-5 | Vessel Traffic Impacts on Marine Mammals and Turtles | II | No Impact | No Impact |
| BIO-6 | Noise and Lighting Impacts on Marine Mammals and Birds | III | No Impact | No Impact |
| BIO-7 | Oil Spill Impacts to Onshore Biological Resources | ı | No Impact See BIO-8 | No Impact See BIO-10 |

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| Impact | Impact Description | Proposed | No Project Alternative | |
|------------|--|------------------------|------------------------|----------------------|
| No. | Impact Description | Project | Truck | Pipeline |
| BIO-8 | Impacts to Onshore Biological Resources from Trucking | No Impact See BIO-7 | III | No Impact See BIO-10 |
| BIO-9 | Oil Spill Impacts to Onshore Biological Resources from Pipeline Construction | No Impact See BIO-7 | No Impact See BIO-8 | II |
| BIO-10 | Oil Spill Impacts to Onshore Biological Resources from Pipeline Operation | No Impact See BIO-7 | No Impact See BIO-8 | I |
| Section 4 | 6.6 Cultural, Historical, and Paleontological Resources | | | |
| CR-1 | Adverse Impacts from Oil Spills | II | II | II |
| CR-2 | Potential Disturbance to Paleontological Resources due to an Oil Spill | III | III | III |
| Section 4 | .7 Land Use, Planning, and Recreation | | | |
| LU-1 | Accidental Oil Releases Could Affect Recreational Activities | I | No Impact | No Impact |
| LU-2 | Oil Spills from the Barge Jovalan in Transit | I | No Impact | No Impact |
| Section 4 | .8 Public Services | | | |
| Neither th | e Project nor Alternatives would have an impact on public services. | No Impact | No Impact | No Impact |
| Section 4 | 9.9 Transportation and Circulation | | | |
| T-1 | Transportation Impacts from Trucks | No Impact | III | No Impact |
| T-2 | Transportation Impacts from Pipeline Construction | No Impact | No Impact | II |
| Section 4 | Section 4.10 Noise | | | |
| N-1 | Increased Noise from Pumps and Barge Engines | III | No Impact | No Impact |
| N-2 | Increased Noise from Trucks | No Impact | III | No Impact |
| N-3 | Noise from Construction Machinery | No Impact | No Impact | II |
| Section 4 | .11 Aesthetics/Visual Resources | | | |

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| Impact | Impact Description | Proposed Project | No Project Alternative | |
|---|---|---------------------|------------------------|-----------|
| No. | impact Description | | Truck | Pipeline |
| VR-1 | Visual Effects from the Increased Presence of the Barge Jovalan | I | No Impact | No Impact |
| VR-2 | Visual Effects from Accidental Oil Spills at or Near the EMT | I | No Impact | No Impact |
| VR-3 | Visual Effects from Accidental Oil Spills from the Barge Jovalan in Transit | I | No Impact | No Impact |
| VR-4 | Visual Effects from the Increase in the Presence of Trucks | No Impact | III | No Impact |
| VR-5 | Visual Effects from Pipeline Construction Activities | No Impact | No Impact | III |
| VR-6 | Visual Effects from Pipeline Installation | No Impact | No Impact | II |
| Section 4.12 Energy and Mineral Resources | | | | |
| ER-1 | Increased Electricity Use by the Project | III | No Impact | No Impact |
| ER-2 | Increased Fossil Fuel Consumption by the Project | III | No Impact | No Impact |
| ER-3 | Increased Fossil Fuel Consumption by the Trucks | No Impact | III | No Impact |
| Section 4 | Section 4.13 Agricultural Resources | | | |
| AG-1 | Impacts to Agricultural Activities from Pipeline Construction | No Impact | No Impact | III |
| Section 4.14 Environmental Justice | | | | |
| EJ-1 | Environmental Justice Effects from Hazards and Odors | III | No Impact | No Impact |
| EJ-2 | Environmental Justice Effects from Truck Traffic | No Impact | III | No Impact |



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